REMARKS

Claims 1 and 3-18 are now pending in this application. Claims 1 and 18 have been amended. Claim 2 remains canceled without prejudice or disclaimer. No new matter has been added.

It should be noted that claim 1 has been amended to replace the "and/or" term with "or," thereby placing the claim in better form for consideration on appeal (see, e.g., MPEP 2173.05(h)(II)). As such, if the rejections should be maintained, it is respectfully requested that the amendment be entered for purposes of appeal.

Objections to the Claims

Claim 18 stands objected to because it recited "planarisaiton material." The Applicant gratefully acknowledges the indication of the misspelling. The claim has been amended to recite "planarisation material." As such, withdrawal of the objection is respectfully requested. In addition, if the rejections should be maintained, entrance of the amendment in the record is respectfully requested, as the amendment places the claim in better form for consideration on appeal.

Rejections under 35 U.S.C. §102(e)

By the Office Action, claims 1, 3, 7-11 and 17 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,014,521 to Fujiike et al. (hereinafter 'Fujiike').

Claim 1 recites:

> A barrier laminate including barrier and planarisation materials for use with a device layer, comprising:
>
> a device layer; and
>
> at least one discontinuous layer of a planarisation material that is external to the device layer and corresponds to a stack including the device layer, wherein the at least one discontinuous layer is divided into unconnected areas distributed along a plane,
>
> wherein the unconnected areas are separated by regions of a barrier material, and
>
> wherein the barrier material separating the unconnected areas is external to the device layer and is resistant to at least one of water and oxygen permeability such that the device layer is protected against at least one of physical degradation or oxidation due to environmental elements.

In support of the rejections of claim 1 of the present application, the Office action equates the barrier laminate recited in claim 1 to a color filter described in Fujiike that permits the output of colored light from pixels in a display device. The Applicants respectfully disagree with such interpretation of a "barrier laminate."

It is well established that "[w]ords of a claim must be given their plain meaning unless the plain meaning is inconsistent with the specification." [1] and that "the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application." [2] In this case, the Applicants has used the term "barrier laminate" when referring to an environmental barrier used to protect a device layer from physical and/or chemical degradation due to environmental elements, such as water and oxygen (see generally, Specification, p. 1, line 1 to p. 2, line 24). According to the ordinary and customary meaning employed by those of ordinary skill in the art, environmental barriers utilized by the present invention are understood to be distinguished from color filters which provide an active role in the display function of the device. For example, U.S. Patent Publication No. 2001/0052752 (hereinafter 'Ghosh I') and U.S. Patent Publication No. 2002/0003403 (hereinafter 'Ghosh II') describe such environmental barriers as being separate and distinct from color filters due to the different functions they provide (see, e.g., Ghosh I & Ghosh II, para. 4, para. 25 and para. 32). Accordingly, the color filter described in Fujiike in no way anticipates the "barrier laminate" recited in claim 1, as a "color filter" is inconsistent with the ordinary and customary meaning of the term "barrier laminate" as employed in the context of the present invention.

Thus, claim 1 is not anticipated by Fujiike. Claims 3, 7-11 and 17 are patentable over Fujiike due at least to their dependencies from claim 1. As such, withdrawal of the rejection is respectfully requested.

---

[1] MPEP § 2111.01(I) (citing In re Zletz, 893 F.2d 319, 321 (Fed. Cir. 1989)).
[2] MPEP § 2111.01(III) (quoting Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc) (emphasis added)

Rejections under 35 U.S.C. §103(a)

Claim 4

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Fujiike in view of U.S. Patent No. 6,265,309 to Gotoh et al. (hereinafter 'Gotoh'). Claim 4 is dependent from claim 1 and recites: wherein said planarisation material is a combination of organic and inorganic materials. Claim 4 is believed to be patentable due at least to its dependency from claim 1. In addition, there are other reasons for which claim 4 is patentable over the cited references. For example, the Examiner acknowledges that Fujiike fails to teach that the planarisation material, purported in the Office Action as being a solidified pigment (3) in FIG. 17A of Fujiike, is a combination of organic and inorganic materials. To cure the deficiencies of Fujiike, the Office Action cites Gotoh.

However, in contrast to the assertions posed in the Office Action, it is respectfully submitted that it would not be obvious to use a smoothing film as taught in Gotoh as a solidified pigment (3) for a pixel in a color filter disclosed in Fujiike. Gotoh is completely unrelated to color filters. Rather, Gotoh is directed to a cleaning agent for semi-conductor devices (see, e.g., Gotoh, Abstract). Although Gotoh mentions the use of an insulation film including organic and inorganic materials over a metal conductive line pattern in a semi-conductor device (see, e.g., Gotoh, column 8, lines 49-55; and column 9, lines 14-22), Gotoh and/of Fujiike nowhere disclose or remotely suggest that the film is a suitable pigment for a pixel in a color filter.

Accordingly, claim 4 is patentable over Gotoh and Fujiike for at least the reasons discussed above. As such, withdrawal of the rejection is respectfully requested.

Claim 5, 12, and 13

Claims 5, 12 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fujiike in view of Ghosh II. Claims 5, 12 and 13 are believed to be patentable over the cited

references due at least to their dependencies from claim 1. In addition, the claims are believed to be patentable over the cited references for other reasons.

In support of the rejection of claims 5, 12 and 13, the Office Action asserts that it would be obvious to employ SiO_2 taught in Ghosh II as the purported "barrier material" disclosed in Fujiike. The Applicants respectfully disagree. Although, as noted by the Examiner, Ghosh II discloses the use of SiO_2 as a platform on which color filter may be laid in an OLED device, Ghosh II and Fujiike, taken singly or in combination, do not disclose or render obvious that SiO_2 is a suitable material for a black matrix configuration or a partition separating different pigments of pixels described in Fujiike. The black matrix of Fujiike is a black resin material that is a light shield employed to improve display contrast between solid pigments of pixels (see, e.g., Fujiike, FIG. 17A, column 15, lines 5-8; column 1, lines 23-25). Furthermore, Fujiike is specifically directed to reducing irregularity in the height of solidified pigments deposited between the partitions (see, e.g., Fujiike, column 2, lines 27-57). Given the typical surface irregularity of SiO_2, use of the material as a partition wall between pigments of pixels may hinder the ability of Fujiike's system to control the height of the pigments, thereby subverting the entire principles of operation of Fujiike. Accordingly, because neither reference discloses or remotely suggests that SiO_2 is suitable as a light shield used to improve display contrast between solidified pigments of different pixels or is suitable for use as a partition wall between pigments in a color filter in which the height of pigments is precisely controlled, it would not be obvious to employ SiO_2 as a black matrix configuration disclosed in Fujiike. Thus, claims 5, 12 and 13 are patentable over Fujiike and Ghosh II, taken singly or in combination.

Claim 6

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Fujiike in view of Ghosh I. Claim 6 is believed to be patentable over the cited references due at least to their dependencies from claim 1. In addition, claim 6 is believed to be patentable over the cited references for other reasons. For example, claim 6 recites, *inter alia*: "wherein said regions of a barrier material forms a checked pattern." In support of the rejection of claim 6, the Office Action alleges that it would be obvious to one of ordinary skill in the art to "incorporate the

checkerboard pattern as taught by Ghosh [I] in the laminate of Fujiike to provide extended borders around the device layers to protect them when the wafer is cut." The Applicants respectfully disagree.

The purported "barrier material" of Fujiike is a black matrix used to separate pigments of color filters in pixels, as discussed above. The checkerboard pattern of Ghosh is of an entirely different scale; the "squares" of the checkerboard pattern conform to separate, individual OLED devices that are subsequently separated by a dicing operation in a mass production process (see, e.g., Ghosh I, para. 30). It is unclear how one of ordinary skill in the art would conform the color filter black matrix of Fujiike to the checkerboard pattern disclosed in Ghosh I, as a square in the resulting black matrix would surround the entire LED device. The borders of the resulting square would encompass all pixels and would be totally incapable of separating colored pigments for individual pixels. Accordingly, claim 6 is believed to be patentable over the cited references at least because it would not be obvious to apply the checkerboard pattern disclosed in Ghosh I to the black matrix disclosed in Fujiike. As such, withdrawal of the rejection is respectfully requested.

Claim 18

Claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Fujiike in view of U.S. Patent No. 4,983,469 to Huzino et al. (hereinafter 'Huzino'). Claim 18 is dependent from claim 1 and, as such, is also directed to a "barrier laminate" employed as an environmental barrier. As discussed above, Fujiike does not anticipate a "barrier laminate" because a "barrier laminate" employed as an environmental barrier, in accordance with its ordinary and customary meaning, is distinguished from a color filter. Furthermore, Huzino fails to cure the deficiencies of Fujiike because Huzino is also directed to a color filter. Accordingly, claim 18 is believed to be patentable over the cited references for at least the reasons discussed above. As such, withdrawal of the rejection is respectfully requested.

Rejections under 35 U.S.C. §102(b)

Claims 14-16 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,339,291 to Codama (hereinafter 'Codama').

Claim 14 recites:

> A method for the manufacture of a discontinuous layer in a barrier laminate for use with a device layer that includes two opposing electrodes comprising:
> - depositing a continuous layer of a planarisation material;
> - removing regions of said layer of a planarisation material; and
> - filling said regions with a barrier material to form a barrier laminate layer, wherein said regions are external to the device layer and correspond to a stack including the device layer such that the barrier material filling said regions is external to the device layer

Similarly, claim 15 recites:

> A method for the manufacture of a discontinuous layer in a barrier laminate for use with a device layer that includes two opposing electrodes comprising:
> - depositing a patterned layer of a planarisation material, whereby regions where no planarisation material is deposited are formed; and
> - filling said regions with a barrier material to form a barrier laminate layer, wherein said regions are external to the device layer and correspond to a stack including the device layer such that the barrier material filling said regions is external to the device layer.

Thus, claims 14 and 15 include the feature of filling unconnected regions of planarisation material with barrier material over or under a device layer that includes opposing two electrodes. As such, during the filling step, the device layer includes two opposing electrodes.

In support of the rejection of claims 14 and 15, the Office action alleges that a second electrode is not shown in the Figures of Codama but is disclosed at column 8, lines 5-7 (see, e.g., Office Action dated March 24, 2009, p. 4, para. 6). However, it is respectfully submitted that the purported barrier material (14) is not filled over or under a device layer that includes two electrodes. As shown in FIG. 2E, the second electrode is not present when the purported barrier material is filled over the first electrode (11a). Indeed, the second electrode is not inserted until after the purported barrier material (14) and purported planarisation material (12a) are removed from the device. For example, Codama describes the process illustrated in FIGS. 2A-2G as "flattening" a "first electrode array." After the flattening process is completed in

step 2G, where the purported barrier material (14) and purported planarisation material (12a) are removed (see, e.g., Codama, column 6, lines 64-67), then the second electrode is formed:

> An organic film including a light-emitting layer is formed on the first electrode (ITO film) that is thus flattened at the end of the pattern. *Then*, a second electrode film is formed on the organic film to fabricate an organic EL display in which the organic EL device of the invention is used.

(Codama, column 8, lines 3-7). Thus, Codama does not disclose or render obvious filling unconnected regions of planarisation material with barrier material over or under a device layer that includes opposing two electrodes.

Accordingly, Codama does not anticipate or render obvious claims 14 and 15 for at least the reasons discussed above. Moreover, Codama does not anticipate or render obvious claim 16 due at least to its dependency from claim 15. As such, withdrawal of the rejection is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes that the application is not in condition for allowance, the Examiner is requested to call the Applicants' representative at the telephone number indicated below to discuss any outstanding issues relating to the allowability of the application. If there is an additional fee occasioned by this response, including an extension fee, please charge any deficiency to Deposit Account No. 141270.

Dated: May 15, 2009

By _____*/Mark L. Beloborodov/*_____
Mark. L. BELOBORODOV, Esq.
Registration No.: 50,773

Philips Intellectual Property & Standards
Three Burlington Woods Drive
Burlington, MA 01803
Telephone No. (781) 418-9363